UNITED STATES PATENT AND TRADEMARK OFFICE

A

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/788,329	02/16/2001	David L. Anson	50037.16US01	6113

27488 7590 11/21/2005

MERCHANT & GOULD (MICROSOFT)
P.O. BOX 2903
MINNEAPOLIS, MN 55402-0903

EXAMINER	
NASH, LASHANYA RENEE	
ART UNIT	**PAPER NUMBER**
2153	

DATE MAILED: 11/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/788,329	ANSON ET AL.	
	Examiner	Art Unit	
	LaShanya R Nash	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *August 30, 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to an Amendment filed August 30, 2005. Claims 1-20 are presented for further consideration.

Response to Arguments

Applicant's arguments see Remarks/Arguments III, with respect to claims 1-19 rejected under 35 USC 103 (a) have been fully considered but are not persuasive.

In considering the Applicant's arguments the following factual remarks are noted:

(I) Applicant contends that the there if no suggestion in either of the references (i.e. Meuronen et al. and Segur) that they may be combined in the suggested manner.

(II) Applicant contends that Segur teaches that a user must send a query to obtain his or her messages.

In considering (I), it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). Examiner respectfully disagrees that problems addressed by Applicant and Meuronen are not related to the

problem addressed in Segur. Examiner asserts that Segur is explicitly concerned with routing mobile communication system messages (i.e. cellular phone data messages, PDA messages; column 1, line 67 to column 2, line 26), which is inclusive of short messages. In addition, Segur is pertinent to the endeavor of efficiently routing multiple format communications to subscribers via a centralized client/server (column 1, lines 24-37 and column 1, lines 56-65). Similarly, Meuronen endeavors to efficiently route messages of multiple format services (column 1, lines 29-51), to subscribers via service-specific short message service centers (column 2, lines 43-53 column 7, lines 25-33). As a result, Segur and Meuronen are pertinent to the particular problem with which the applicant was concerned (i.e. routing SMS messages), as well as being pertinent to each other. Subsequently, a person of ordinary skill in the art concerned with the invention as disclosed by Meuronen would be disposed to consider Segur.

In considering (II), Applicant contends that Segur teaches that a user must send a query to obtain his or her messages. However, Applicant's arguments suggest that the references fail to show certain features of applicant's invention (i.e. an application being informed that a message is waiting without instigating the recovery of the message) that are not recited in the rejected claims. In addition, the claim language does not exclude the additional step of a query being sent in order to receive the aforementioned indication informing an application that the messages are waiting, as disclosed by Segur. Although the claims are interpreted in light of the specification, limitations from the

specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, the Examiner maintains rejections as set forth below in the office action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meuronen et al. (US Patent 6,292,669), and further in view of Segur (US Patent 6,212,550) and Gehr (US Patent 5,828,847), hereinafter referred to as Meuronen, Segur, and Gehr respectively.

In reference to claim 1, Meuronen discloses a method and system for routing Short Messaging Service (SMS) messages based on the particular SMS service (i.e. application) required for receiving SMS messages of a designated format (column 2, lines 4-23). Meuronen further discloses that SMS messages are routed to a specific SMS service via the short message service center (SMSC) servers (i.e. providers) that are associated with the aforementioned services (column 5, lines 29-38 and column 7, lines 20-25). Meuronen discloses a computer-implemented SMS routing method, (abstract, column 2 lines 4-28) comprising: providing a plurality of providers (Figure 3-items SMSC1; SMSC2;

SMSC3; SMSC4; column 5, lines 10-40), wherein each provider is associated with a message type (i.e. PID; column 5, lines 5-25), (e.g. SMSC3 associated with telefax message type; column 5;column 1, lines 45-51); receiving a message, (column 7, lines 34-38 and Figure 6); routing the message to the plurality of providers until at least one provider recognizes the message type associated with the message, (i.e. message is routed to a short message service center and routed further to the short message service center associated with desired service; column 7, lines 7-20; Figure 5); and associating the message with at least one of the plurality of providers when at least one of the plurality of providers recognizes the message type, (column 7, lines 38-44). However, Meuronen does not disclose informing an application associated with the provider that the message is waiting. Nonetheless, this modification would have been obvious to one of ordinary skill in the art at the time of the invention, as evidenced by Segur.

In an analogous art, Segur discloses a method that involves a server informing an application that messages are waiting in order to convert the stored messages into the appropriate data format to be received by that application (column 1, lines 62-65; column 3, lines 35-43; and Figure 6). One of ordinary skill in the art would have been so motivated to implement this modification in the SMS routing methodology as disclosed by Meuronen, so as to increase the SMS routing functionality to store messages for later transmission in case the receiving party is not reached (Meuronen column 4, lines 31-35). However, the references do not teach prioritized SMSC servers (i.e. providers); and the

provider with the highest priority receives the message first; and routing the message to the provider with second highest priority when the first highest priority rejects the message. Nonetheless, one of ordinary skill in the art would have readily recognized the advantages to these modifications, as evidenced by Gehr.

In analogous art, Gehr teaches prioritizing a set of communication servers based on a priority level in a hierarchical list for routing client request to alternate prioritized servers (i.e. providers) (column 5, lines 20-31 and column 2, lines 56-65). Gehr further discloses that the message routing process is self-directed to request servers according to the hierarchy of successive alternate servers until the request is processed to completion and the provider with the highest priority receives the message first; and routing the message to the provider with second highest priority when the first highest priority rejects the message (column 7, lines 32-39 and Figure 5B). One of ordinary skill in the art at the time of the invention would have been motivated to incorporate the aforementioned limitations into the SMS message routing software in order for certain SMS services that are though to have higher volume of use to have a higher priority in the logical routing process.

In reference to claim 20, Meuronen discloses a method and system for routing Short Messaging Service (SMS) messages based on the particular SMS service (i.e. application) required for receiving SMS messages of a designated format (column 2, lines 4-23). Meuronen further discloses that SMS messages

are routed to a specific SMS service via the short message service center (SMSC) servers (i.e. providers) that are associated with the aforementioned services (column 5, lines 29-38 and column 7, lines 20-25). Meuronen discloses:

- A computer-implemented for routing messages for a device (abstract, column 2 lines 4-28) comprising:
- Providing a plurality of providers (Figure 3-items SMSC1; SMSC2; SMSC3; SMSC4; column 5, lines 10-40), wherein each provider is associated with a message type and at least one application, (e.g. SMSC3 associated with telefax; column 5;column 1, lines 45-51);
- Receiving at least one message, (column 7, lines 34-38 and Figure 6) including a provider character sequence (i.e. PID parameter; column 5, lines 5-25);
- Routing the message to the plurality of providers until at least one provider recognizes the message type associated with the message, (i.e. message is routed to a short message service center and routed further to the short message service center associated with desired service; column 7, lines 7-20; Figure 5); and
- Associating the request with the recognized provider (column 7, lines 38-44).

However, Meuronen does not disclose informing an application associated with the provider that the message is recognized (i.e. waiting); requesting by at least one of the applications, delivery of the message; formatting the message for the

application; and delivering the formatted message to the application. Nonetheless, this modification would have been obvious to one of ordinary skill in the art at the time of the invention, as evidenced by Segur.

In an analogous art, Segur discloses a method that involves a server informing an application associated with the provider that the message is recognized (i.e. waiting); requesting by at least one of the applications, delivery of the message; formatting the message for the application; and delivering the formatted message to the application (column 1, lines 62-65; column 3, lines 35-43; and Figure 6). One of ordinary skill in the art would have been so motivated to implement this modification in the SMS routing methodology as disclosed by Meuronen, so as to increase the SMS routing functionality to store messages for later transmission in case the receiving party is not reached (Meuronen column 4, lines 31-35). However, the references do not teach prioritizing the plurality of SMSC servers (i.e. providers), wherein the plurality of providers is prioritized from a high priority to a low priority. Nonetheless, one of ordinary skill in the art would have readily recognized the advantages to these modifications, as evidenced by Gehr.

In analogous art, Gehr teaches prioritizing a set of communication servers based on a priority level in a hierarchical list for routing client request to alternate prioritized servers (i.e. providers) (column 5, lines 20-31 and column 2, lines 56-65). Gehr further discloses prioritizing the plurality of SMSC servers (i.e. providers), wherein the plurality of providers is prioritized from a high priority to a low priority, (column 7, lines 32-39 and Figure 5B). One of ordinary skill in the art

at the time of the invention would have been motivated to incorporate the aforementioned limitations into the SMS message routing software in order for certain SMS services that are though to have higher volume of use to have a higher priority in the logical routing process.

In reference to claim 2, Segur shows the SMS method comprising: waiting for the application to request the message, (Segur column 3, lines 52-55 and Figure 6); formatting the message to the requirements of the application, (Segur column 3, lines 55-58 and Figure 6); and delivering the message to the application, (Segur column 3, lines 62-65 and Figure 6).

In reference to claim 3, Meuronen and Segur teach a SMS message routing method that involves providing a message to a preferred default SMSC server (i.e. provider), and subsequently determining the appropriate provider that is associated with the message for proper routing (Meuronen column 7, lines 7-20). However, the references do not explicitly teach providing the message to a provider based on priority levels. Nevertheless, automatic routing of client messages to servers based on priority was well known in the art at the time of the invention, as evidenced by Gehr. Therefore, these modifications to the SMS routing method would have been obvious to one of ordinary skill in the art.

In a analogous art, Gehr teaches providing client requests to a server based on priority in order to automatically route messages from clients to servers according to a predetermined hierarchically order server-communication method

preference scheme, (column 2, lines 56-65;column 5, lines 18-31; and Figure 5B). One of ordinary skill in the art would have been so motivated to implement the aforementioned modifications, so as to provide certain SMS services that are thought to have a higher volume of requests a higher priority in the logical routing process.

In reference to claim 4, Meuronen, Segur, and Gehr show a SMS message routing method wherein the SMSCs (i.e. providers) have a unique priority level, (Gehr column 2, lines 56-55; column 5, lines 20-31; and Figure 2).

In reference to claim 5, Meuronen, Segur, and Gehr show a SMS routing method comprising: receiving a response from the prioritized SMSC server (i.e. provider) indicating if the prioritized provider is associated with the message, (Meuronen column 7, lines 12-14; column 7, lines 34-42; and Gehr column 2, lines 56-65); and associating the message with the prioritized provider if the received response indicates that the prioritized provider is associated with the message, (Meuronen column 7, lines 14-17, and column 7, lines 42-44).

In reference to claim 6, Meuronen, Segur, and Gehr show a SMS routing method wherein: associating the message with the prioritized provider if the received response indicates that the prioritized provider is associated with the message further comprises storing the message in a location associated with the

prioritized provider, (Meuronen column 7, lines 14-17; column 7, lines 42-44; and column 4, lines 31-35).

. **Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meuronen and Segur as applied to claims above, and further in view of Lothia et al. (US Patent 6,560,456) and Gehr (US Patent 5,828,847), hereinafter referred to as Lothia and Gehr.**

In reference to claim 7, Meuronen discloses a method for routing SMS messages based on the required SMS service (i.e. application) that comprises: receiving a message having a message type indicated by a character sequence in the message (i.e. PID parameter; column 5, lines 5-25), (e.g. telefax message (group3); column 5; column 7, lines 34-38; Figure 3); routing the message to a first provider (i.e. default) from a list of providers (i.e. database; column 5, lines 52-65), (column 7, lines 7-20; Figure 5); associating the message with the first provider when the first provider recognizes the character sequence, (columns 5-6; column 7, lines 38-44); and routing the message to a second provider when the first provider does not recognize the character sequence, (i.e. message is routed to a short message service center and routed further to the short message service center associated with desired service; column 7, lines 7-20; Figure 5). However, Meuronen fails to disclose informing an application associated with the provider that the message is waiting. Nonetheless, this modification would have been obvious to one of ordinary skill in the art at the time of the invention, as evidenced by Segur.

In an analogous art, Segur discloses a method that consists of informing a receiving application of stored messages in order to format the messages to the requirements of the application (column 1, lines 62-65; column 3, lines 35-43; and Figure 6). One of ordinary skill in the art would have been so motivated to implement this modification in the SMS routing methodology as disclosed by Meuronen, so as to increase the SMS routing functionality to store messages for later transmission in case the receiving party is not reached (Meuronen column 4, lines 31-35). Although Meuronen and Segur disclose substantial features of the claimed invention, the references fail to disclose a computer-readable medium having the computer-executable instructions for the aforementioned SMS routing method. Nonetheless, SMS routing software was well known in the art at the time of the invention, as evidenced by Lothia. Therefore, this modification to the SMS routing system would have been obvious to one of ordinary skill in the art.

Lothia explicitly discloses, "existing Mobile Switching Center (MSC) software" that is employed by SMS networks to rout email and other text messages to subscribers (column 1, lines 1-43 and column 1, line 65 to column 2, line 3). One of ordinary skill in the art would have been so motivated to incorporate a software product for SMS routing in order to provide a technique for the unification of different SMSCs and associated message formats that may be used in different telecommunication system. However, the references do not teach prioritized SMSC servers (i.e. providers); and the provider with the highest priority receives the message first; and routing the message to the provider with

second highest priority when the first highest priority rejects the message. Nonetheless, one of ordinary skill in the art would have readily recognized the advantages to these modifications, as evidenced by Gehr.

In analogous art, Gehr teaches prioritizing a set of communication servers based on a priority level in a hierarchical list for routing client request to alternate prioritized servers (i.e. providers) (column 5, lines 20-31 and column 2, lines 56-65). Gehr further discloses that the message routing process is self-directed to request servers according to the hierarchy of successive alternate servers until the request is processed to completion and the provider with the highest priority receives the message first; and routing the message to the provider with second highest priority when the first highest priority rejects the message (column 7, lines 32-39 and Figure 5B). One of ordinary skill in the art at the time of the invention would have been motivated to incorporate the aforementioned limitations into the SMS message routing software in order for certain SMS services that are though to have higher volume of use to have a higher priority in the logical routing process.

In reference to claim 8, Meuronen, Segur, and Lothia show a SMS routing software product with computer-executable instructions comprising: wherein associating the message with the first provider further includes waiting for the application to request the message, (Segur column 3, lines 52-55 and Figure 6); formatting the message to the requirements of the application, (Segur column 3,

lines 55-58 and Figure 6); and delivering the message to the application, (Segur column 3, lines 62-65 and Figure 6).

In reference to claim 9, Meuronen, Segur, and Lothia show a SMS routing software product with computer-executable instructions wherein: formatting the message for the application further comprises providing access to the message to the provider associated with the requesting service (i.e. application), (Meuronen column 5, lines 29-38 and column 7, lines 41-45); and the provider associated with the requesting application formatting the message to the requirements of the application, (Meuronen column 6, lines 34-43;Segur column 1, lines 55-65; and column 3, lines 55-58).

In reference to claim 10, Meuronen, Segur, and Lothia teach substantial features of the claimed invention, specifically SMS message routing software with executable instructions that comprises providing a message to a preferred default SMSC server (i.e. provider), and subsequently determining the appropriate provider that is associated with the message for routing, (Meuronen column 7, lines 7-20). However, the references do not teach a software product with computer-executable instructions comprising: prioritizing the list of SMSC servers (i.e. providers) based on a priority level; and providing access to the messages to each of the providers in order of priority until the message has been associated. Nonetheless, one of ordinary skill in the art would have readily recognized the advantages to these modifications, as evidenced by Gehr.

Gehr teaches prioritizing a set of communication servers based on a priority level in a hierarchical list for routing client request to alternate servers (column 5, lines 20-31 and column 2, lines 56-65). Gehr further discloses that the message routing process is self-directed to request servers according to the hierarchy of successive alternate servers until the request is processed to completion (column 7, lines 32-39 and Figure 5B). One of ordinary skill in the art at the time of the invention would have been motivated to incorporate the aforementioned limitations into the SMS message routing software in order for certain SMS services that are though to have higher volume of use to have a higher priority in the logical routing process.

In reference to claim 11, Meuronen, Segur, Gehr and Lothia show a SMS routing software product with computer-executable instructions wherein: the SMSCs (i.e. providers) have a unique priority level, (Gehr column 2, lines 56-55;column 5, lines 20-31; and Figure 2).

In reference to claim 12, Meuronen, Segur, Gehr and Lothia show a SMS routing software product with computer-executable instructions comprising: receiving a response from the prioritized SMSC server (i.e. provider) indicating if the prioritized provider is associated with the message, (Meuronen column 7, lines 12-14; column 7, lines 34-42; and Gehr column 2, lines 56-65); and associating the message with the prioritized provider if the received response

indicates that the prioritized provider is associated with the message, (Meuronen column 7, lines 14-17, and column 7, lines 42-44).

In reference to claim 13, Meuronen, Segur, Gehr and Lothia show a SMS routing software product with computer-executable instructions wherein: associating the message with the prioritized provider if the received response indicates that the prioritized provider is associated with the message further comprises storing the message in a location associated with the prioritized provider, (Meuronen column 7, lines 14-17; column 7, lines 42-44; and column 4, lines 31-35).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meuronen as applied to claims above, and further in view of Kamm et al. (US Patent 5,457,680) and Gehr (US Patent 5,828,847), hereinafter referred to as Kamm and Gehr.

In reference to claim 14, Meuronen discloses a system for routing SMS messages to SMS service (i.e. applications). Meuronen specifically discloses SMSC and short message gateway message service center (SMS-GMSC) servers as routing devices within the SMS routing system (column 7, lines 35-44;Figure 3; and Figure 5). In addition, Meuronen further discloses that the SMS routing device performs actions that include: receiving a message having a provider indicator (i.e. i.e. PID parameter; column 5, lines 5-25), (column 5, line 65 to column 6, line 2); routing the message until at least one of the providers

recognizes the message (i.e. message is routed to a short message service center and routed further to the short message service center associated with desired service; column 7, lines 7-20; Figure 5); associating the message with at least one provider when at least the one provider recognizes the provider indicator, (column 6, line 2-7; 7, lines 7-20; and Figure 4); and delivering the message to an application associated with the at least one provider when the at least one provider recognizes the message, (column 6, line 47-54 and column 6, line 66 to column 7, line 44). However, Meuronen fails to show explicitly a system for routing SMS messages comprising: a processor and a computer-readable medium; an operating system stored in the computer readable medium and executing on the processor; and a communication connection device operating under the control of the operating environment. Nonetheless, routing systems with these aforementioned limitations were well known in the art at the time of the invention, as further evidenced by Kamm. Thus, these would have been obvious modifications for the SMS routing system disclosed by Meuronen to one of ordinary skill in the art.

In an analogous art, Kamm discloses gateway servers, which are employed in a mobile communication routing system, that comprise: a processor and a computer-readable medium, (column 5, lines 55-56 and Figure 1A); an operating system stored in the computer readable medium and executing on the processor, (column 5, lines 58-66 and Figure 1A); and a communication connection device operating under the control of the operating environment, (column 5, lines 37-43 and Figure 1A). One of ordinary skill in the art would have

readily recognized the advantages to implementing the aforementioned limitations into the short message gateway MSCs servers as disclosed in the SMS routing system, so as ensure that data packets sent to and received from a subscriber are reliably communicated (Kamm column 3, lines 5-11). However, the references do not teach: the message is routed according to a priority level of the server (i.e. providers); wherein the provider having the having the highest level of priority receives the message first, and wherein the message is routed to a provider having a second highest level of priority when the provider having the first highest level of priority does not recognize the provider indicator. Nonetheless, one of ordinary skill in the art would have readily recognized the advantages to these modifications, as evidenced by Gehr.

Gehr teaches prioritizing a set of communication servers based on a priority level in a hierarchical list for routing client request to alternate servers (column 5, lines 20-31 and column 2, lines 56-65). Gehr further discloses that the message routing process is self-directed to request servers according to the hierarchy of successive alternate servers until the request is processed to completion; wherein the provider having the having the highest level of priority receives the message first, and wherein the message is routed to a provider having a second highest level of priority when the provider having the first highest level of priority does not recognize the message (column 7, lines 32-39 and Figure 5B). One of ordinary skill in the art at the time of the invention would have been motivated to incorporate the aforementioned limitations into the SMS

message routing software in order for certain SMS services that are though to have higher volume of use to have a higher priority in the logical routing process.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meuronen, Kamm, and Gehr as applied to claims above, and further in view of Segur.

In reference to claim 15, Meuronen and Kamm show substantial features of the claimed invention, specifically a system for routing SMS messages. However, the references fail to show: waiting for the application to request the message; and formatting the message to the requirements of the application. These modifications would have been obvious to the SMS-GMSC server (i.e. routing device) of the disclosed SMS routing system, as evidenced by Segur.

In an analogous art, Segur discloses a multi-format communications server in which the functionality comprises: waiting for the application to request the message, (Segur column 3, lines 52-55 and Figure 2); and formatting the message to the requirements of the application, (Segur column 3, lines 55-58 and Figure 2). One of ordinary skill in the art would have been so motivated to implement these modifications to the SMS routing system, so as to support unification of different SMSCs and associated message formats that may be used in different telecommunication systems.

In reference to claim 16, Meuronen, Kamm, and Segur show a SMS message routing system in which the SMS-GMSC (i.e. routing device) provides a

message to a preferred default SMSC server (i.e. provider), and subsequently the default SMSC determines the appropriate provider that is associated with the message for complete routing, (Meuronen column 7, lines 7-20 and Figure 5). However, the references do not explicitly show providing the message to a provider based on priority levels. Nevertheless, automatic routing of client messages to server based on priority was well known in the art at the time of the invention, as evidenced by Gehr. Therefore, these modifications to the SMS routing system would have been obvious to one of ordinary skill in the art.

In a analogous art, Gehr teaches a client-server communication architecture that provides client requests to a server based on priority in order to automatically route messages from clients to servers according to a predetermined hierarchically ordered list of successive alternate servers, (column 2, lines 56-65;column 5, lines 18-31;Figure 1; and Figure 2). One of ordinary skill in the art would have been motivated to accordingly modify the SMS message routing system in order to provide certain SMS services that are thought to have a higher volume of requests a higher priority in the logical routing process, and thereby increasing system efficiency.

In reference to claim 17, Meuronen, Kamm, Segur, and Gehr show a SMSC and SMS-GMSC server (i.e. routing device) of the SMS routing system comprising: receiving a response from the prioritized SMSC server (i.e. provider) indicating if the prioritized provider is associated with the message, (Meuronen column 7, lines 12-14; column 7, lines 34-42; and Gehr column 2, lines 56-65);

and associating the message with the prioritized provider if the received response indicates that the prioritized provider is associated with the message, (Meuronen column 7, lines 14-17, and column 7, lines 42-44).

In reference to claim 18, Meuronen, Kamm, Segur, and Gehr show a SMSC and SMS-GMSC server (i.e. routing device) of the SMS routing system wherein: associating the message with the prioritized provider if the received response indicates that the prioritized provider is associated with the message further comprises storing the message in a location associated with the prioritized provider, (Meuronen column 7, lines 14-17; column 7, lines 42-44;column 4, lines 31-35; and Figure 5).

In reference to claim 19, Meuronen, Kamm, Segur, and Gehr show a SMSC and SMS-GMSC server (i.e. routing device) of the SMS routing system wherein: formatting the message for the application further comprises providing access to the message to the provider associated with the requesting service (i.e. application), (Meuronen column 5, lines 29-38 and column 7, lines 41-45); and the provider associated with the requesting application formatting the message to the requirements of the application, (Meuronen column 6, lines 34-43; Figure 5; Segur column 1, lines 55-65; and column3, lines 55-58).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaShanya R Nash whose telephone number is (571) 272-3957. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LaShanya Nash
Art Unit, 2153
November 14, 2005

Supervisory Examiner